Introduced by Assembly Member Bonta

February 2, 2016

An act to add Section 39668.5 to, and to add Article 11.3 (commencing with Section 25240) to Chapter 6.5 of Division 20 of, the Health and Safety Code, relating to hydrogen fluoride, and declaring the urgency thereof, to take effect immediately.

LEGISLATIVE COUNSEL'S DIGEST

AB 1759, as introduced, Bonta. Hydrogen fluoride: notice of use: substitution.

(1) Existing law requires the State Air Resources Board to adopt airborne toxic control measures to reduce emissions of toxic air contaminants from nonvehicular sources. Existing law prescribes civil penalties for violations of specified air pollution control laws, rules, regulations, permits, or orders of the State Air Resources Board or of an air pollution control district or air quality management district.

This bill would require an owner or operator of an oil refinery that uses hydrogen fluoride, hydrofluoric acid, or modified hydrofluoric acid in its operations to send out biannual notices to each business, school, child care facility, library, church, community facility, senior facility, and residence within a 3.5-mile radius of the refinery, as specified. The bill would require the cost of the notice to be paid by the owner or operator of the refinery. The bill would require the owner or operator to file a copy of the notice and distribution list with the State Air Resources Board. An owner or operator who violates these provisions would be subject to those civil penalties.

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(2) Existing law generally regulates the management of hazardous waste. A violation of the hazardous waste control laws is a crime.

This bill would require a business that, at any time, handles, maintains, or stores more than 250 gallons of hydrogen fluoride or hydrofluoric acid to, if possible, convert to a known, significantly less hazardous substitute by January 1, 2017. If that conversion is not possible and the business is located within 2 miles of a residential dwelling, the bill would require the business to cease handling, maintaining, or storing hydrogen fluoride and hydrofluoric acid by January 1, 2017. Because a violation of these requirements would be a crime, the bill would impose a state-mandated local program.

(3) The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that no reimbursement is required by this act for a specified reason.

(4) This bill would declare that it is to take effect immediately as an urgency statute.

Vote: ²/₃. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

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The people of the State of California do enact as follows:

- 1 SECTION 1. The Legislature finds and declares all of the 2 following:
- 3 (a) Modified hydrofluoric acid, a solution of hydrogen fluoride 4 and water, is used by two refineries in California to manufacture 5 high octane fuel.
- 6 (b) According to the United States Chemical Safety Board, 7 "Hydrofluoric acid is one of the most hazardous and deadly 8 chemicals used in petroleum refining."
 - (c) In February 2015, an explosion at the Exxon Mobil Torrance refinery blanketed nearby neighborhoods with catalyst dust and felt like a 1.7 magnitude earthquake. The explosion nearly missed the Torrance refinery's storage of modified hydrofluoric acid.
- 13 (d) Investigations have shown that since 1979 there have been 14 more than 80 incidents at the Torrance refinery involving 15 hydrofluoric acid.
- 16 (e) According to the federal Centers for Disease Control and 17 Prevention, "Hydrogen fluoride gas, even at low levels, can irritate

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the eyes, nose, and respiratory tract. Breathing in hydrogen fluoride at high levels or in combination with skin contact can cause death from an irregular heartbeat or from fluid buildup in the lungs."

- (f) People who survive after being severely injured by breathing in hydrogen fluoride may suffer lingering chronic lung disease or prolonged or permanent visual defects, blindness, or the total destruction of the eye.
- (g) Residents in southern California have tried to ban the use of hydrofluoric acid at refineries for more than 25 years.
- (h) Previous attempts to ban hydrofluoric acid at refineries in California have ended in litigation. Notably, in 1991, Ultramar, the then-operator of the Wilmington refinery sued the South Coast Air Quality Management District after the district adopted a rule phasing out the use of hydrofluoric acid.
- (i) Today, 616,000 residents in California live within 3.5 miles of refineries that combined store more than 60,000 lbs of modified hydrofluoric acid.
- (j) Article I of the California Constitution declares, "All people are by nature free and independent and have inalienable rights. Among these are enjoying and defending life and liberty, acquiring, possessing, and protecting property, and pursuing and obtaining safety, happiness, and privacy."
- (k) Even in its modified form, hydrofluoric acid could kill more than 500,000 Californians at any moment, causing a threat to property and safety.
- SEC. 2. Article 11.3 (commencing with Section 25240) is added to Chapter 6.5 of Division 20 of the Health and Safety Code, to read:

Article 11.3. Hydrogen Fluoride

31 25240. The Legislature finds and declares all of th

- 25240. The Legislature finds and declares all of the following: (a) Hydrogen fluoride, a highly toxic and highly corrosive mineral acid used in the manufacture of unleaded gasoline and refrigerants, is a harmful and potentially deadly toxic gas.
- (b) If released, hydrogen fluoride creates a deadly gas cloud that is toxic to the respiratory system. Inhalation of hydrogen fluoride gas can result in irritation, inflammation, bronchiolar ulceration, pulmonary hemorrhage and edema, and death.

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(c) Hydrogen fluoride and hydrofluoric acid pose significantly greater risks than sulfuric acid, an alternative chemical that can be substituted in the manufacture of unleaded gasoline.

- (d) An uncontrolled release of hydrogen fluoride would endanger human life and health over an area six times as large as a comparable release of sulfuric acid. A hydrogen fluoride spill that was 90 percent controlled would endanger human life outside of the spill site, while no similar threat would exist from a spill of sulfuric acid. Tests have shown that a worst case spill of liquid hydrogen fluoride or hydrofluoric acid could produce a cloud that could be lethal for five miles downwind. Under normal spill conditions, sulfuric acid does not vaporize to form a dangerous cloud.
- (e) Unforeseeable and unpreventable accidental releases of hydrogen fluoride could occur in several instances, including earthquake, mechanical or structural defects in equipment, human error, sabotage, and, in locations with considerable air traffic, aircraft disasters.
- (f) The storage, transport, and use of hydrogen fluoride introduces the potential for serious public health risks. Chemical alternatives are available and should be used as an alternative to hydrogen fluoride to reduce the possibility of public endangerment.
- 25240.2. (a) A business that, at any time, handles, maintains, or stores more than 250 gallons of hydrogen fluoride, including hydrofluoric acid, shall, if possible, convert to a known, significantly less hazardous substitute by January 1, 2017.
- (b) If it is not possible for a business to convert to a known, significantly less hazardous substitute, as specified in subdivision (a), and the business is located within two miles of a residential dwelling, the business shall cease handling, maintaining, or storing hydrogen fluoride and hydrofluoric acid by January 1, 2017.
- SEC. 3. Section 39668.5 is added to the Health and Safety Code, to read:
- 39668.5. (a) An owner or operator of an oil refinery that uses hydrogen fluoride, hydrofluoric acid, or modified hydrofluoric acid in its operations shall send out biannual notices to each business, school, child care facility, library, church, community facility, senior facility, and residence within a three-and-a-half-mile radius of the refinery.

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(1) (A) Notice recipients located within a two-mile radius from the refinery shall be warned they may live in a lethal zone.

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- (B) "Lethal zone" means the area identified in a worst case scenario to expose individuals to ERPG-3 level toxins.
- (C) "ERPG-3" is the maximum airborne concentration below which nearly all individuals could be exposed for up to one hour without experiencing or developing life-threatening health effects.
- (2) (A) Notice recipients located outside a two-mile radius but within a three-and-a-half-mile radius from the refinery shall be warned they may live in a long-term illness zone.
- (B) "Long-term illness zone" means the area identified in a worst case scenario to expose individuals to ERPG-2 level toxins.
- (C) "ERPG-2" is the maximum airborne concentration below which nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action.
- (3) Notice recipients located within a three-and-a-half-mile radius from the refinery shall be provided the Internet Web site address of the United States Environmental Protection Agency's Vulnerable Zone Indicator System.
- (b) Costs for the notice shall be paid by the owner or operator of the refinery.
- (c) The owner or operator shall file a copy of the notice and distribution list with the state board.
- SEC. 4. No reimbursement is required by this act pursuant to Section 6 of Article XIIIB of the California Constitution because the only costs that may be incurred by a local agency or school district will be incurred because this act creates a new crime or infraction, eliminates a crime or infraction, or changes the penalty for a crime or infraction, within the meaning of Section 17556 of the Government Code, or changes the definition of a crime within the meaning of Section 6 of Article XIII B of the California Constitution.
- SEC. 5. This act is an urgency statute necessary for the 36 immediate preservation of the public peace, health, or safety within the meaning of Article IV of the Constitution and shall go into immediate effect. The facts constituting the necessity are:

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- In order to address the high risk to the public of exposure to hydrogen fluoride, including hydrofluoric acid, it is necessary this bill take effect immediately. 1
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